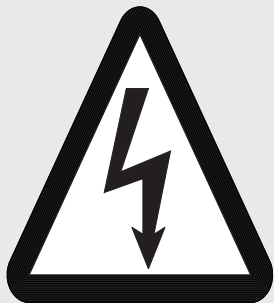
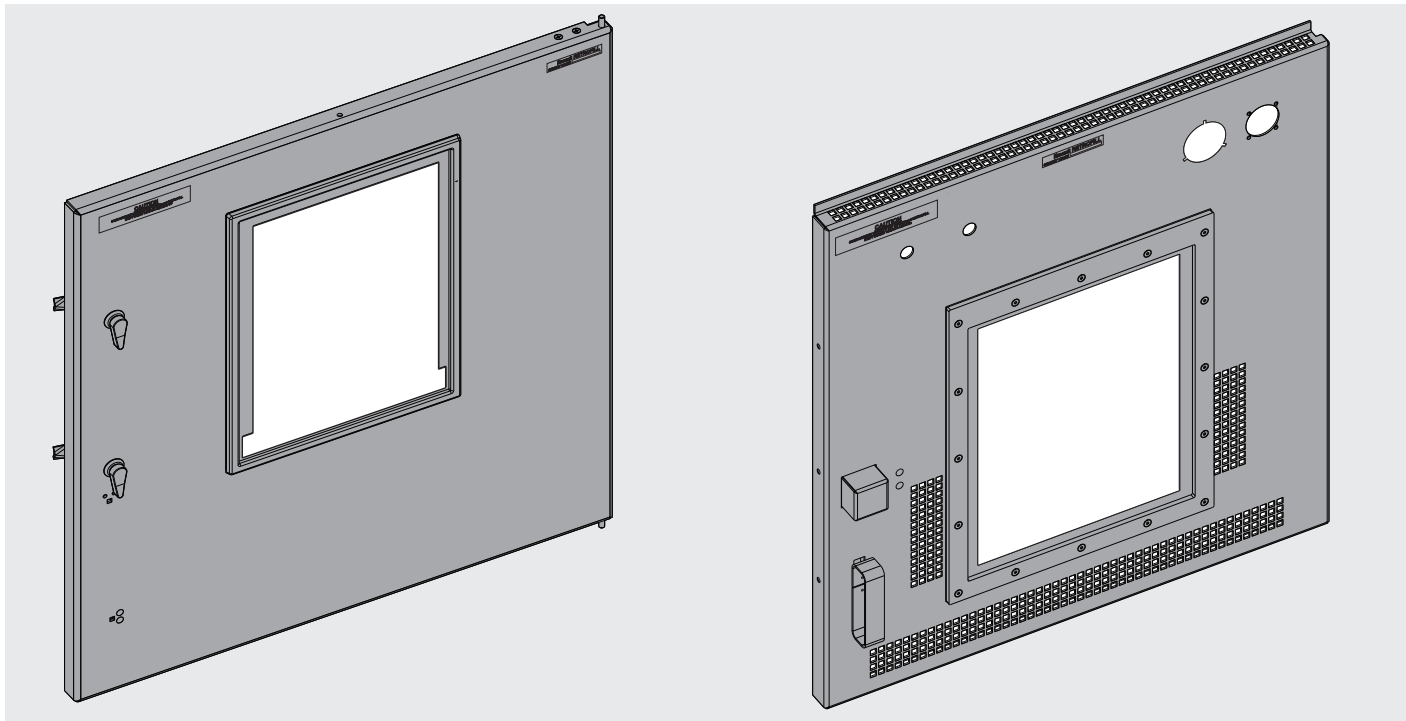


Emax2 Retrofill

Installation instruction manual of full door kits for replacement of AK/AKR/WP breakers with Emax2



DANGER

- Turn off all power to switchgear. Tagout and lockout main source, upstream or main breaker.
- Failure to comply with these instructions will result in death or serious injury from severe burns caused by arc flashing that has exceedingly high temperatures.
- Always wear personal protection equipment according to OSHA standards and appropriate to the severity of potential burns.
- Ensure only qualified personnel install, operate, service and maintain all electrical equipment.

AKD-5/6 DR/CiC Emax Full Door Kits

Retrofit doors can be ordered as required, depending on door size and door cutout options for accommodating fascia, lamps and ammeters. Refer Figure 1 for cutout options. Table 1 lets you select a specific door type for AKD5/6 switch gear. It can be ordered by catalogue numbers by referring to the last column in the table. All the doors in the Table 1 are right-hand doors. It takes about 15 to 20 minutes to install the retro fill door(s) in the switchgear.

Table 1 Replacement Door Categories (TOP LEVEL)

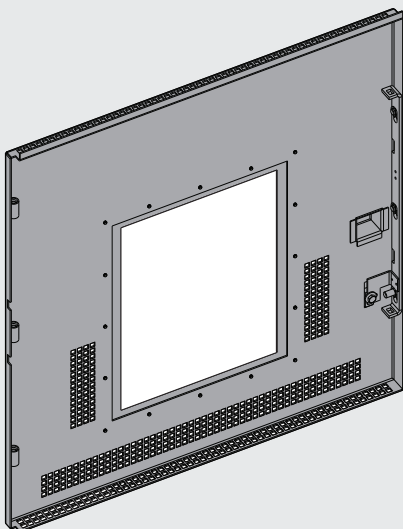
LV Switchgear	Breaker Type	Cut Out Options			Door Width (inches)	CAT#
		Fascia Cutout Only	Fascia & Lamps	Fascia, Lamps & Ammeter		
AKD5	AK25	YES			20	2TSE431970R1000
	AK25			YES	20	2TSE431971R1000
	AK25	YES			22	2TSE431972R1000
	AK25		YES		22	2TSE431973R1000
	AK25			YES	22	2TSE431974R1000
	AK25	YES			27	2TSE431975R1000
	AK25		YES		27	2TSE431976R1000
	AK25			YES	27	2TSE431977R1000
	AKT50	YES			27	2TSE431981R1000
	AKT50		YES		27	2TSE431982R1000
	AKT50			YES	27	2TSE431983R1000
	AK50	YES			27	2TSE431978R1000
	AK50		YES		27	2TSE431979R1000
	AK50			YES	27	2TSE431980R1000
	AK75	YES			30	2TSE432021R1001
	AK75		YES		30	2TSE432021R1002
	AK75			YES	30	2TSE432021R1003
	AK100	YES			38	2TSE432023R1001
	AK100		YES		38	2TSE432023R1002
	AK100			YES	38	2TSE432023R1003
AKD6	AKR30/50/T50	YES			22	2TSE432192R1000
	AKR30/50/T50		YES		22	2TSE432190R1000
	AKR30/50/T50			YES	22	2TSE432191R1000
	AKR30/50/T50	YES			27	2TSE432194R1000
	AKR30/50/T50		YES		27	2TSE432195R1000
	AKR30/50/T50			YES	27	2TSE432193R1000
	AKR75/100	YES			30	2TSE432199R1001
	AKR75/100		YES		30	2TSE432199R1002
	AKR75/100			YES	30	2TSE432199R1003

NOTES:

- 1) All AK25 doors come with 3.75" bump-out.
- 2) 27" doors are also available for stack width of 30" and 38".
- 3) All AKD6 AKR75/100 30" doors come with 0.60" bump-out.

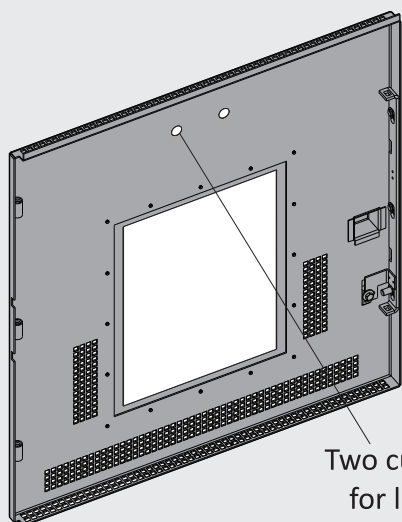
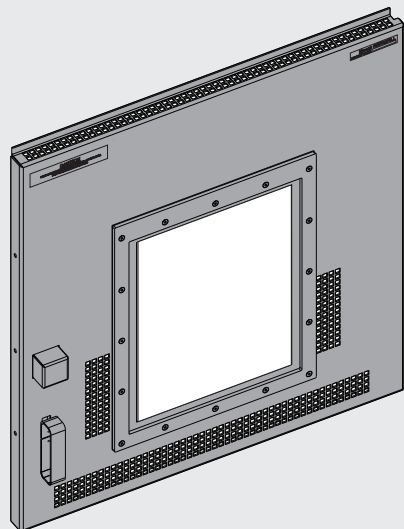
Figure 1. Typical door for AKD5/6 with and without cutouts

Door Interior View



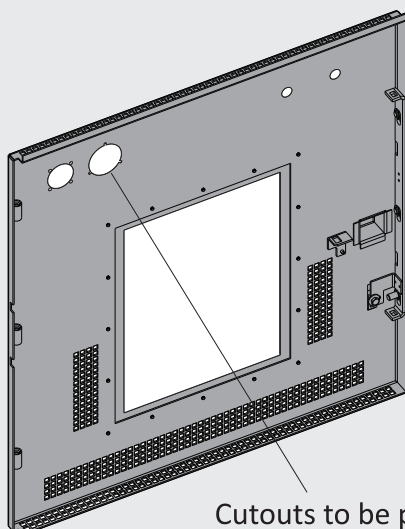
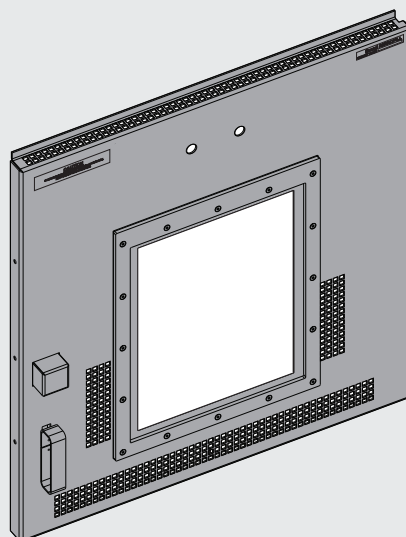
Only fascia cutout

Door Exterior View



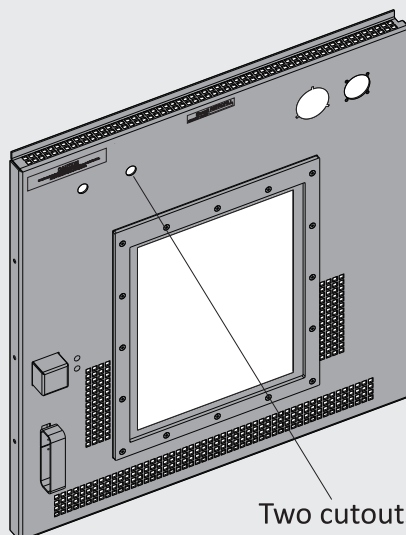
Two cutouts
for lamp

Fascia and lamp cutouts



Cutouts to be punched
for accessories

Fascia, lamp and
ammeter cutouts



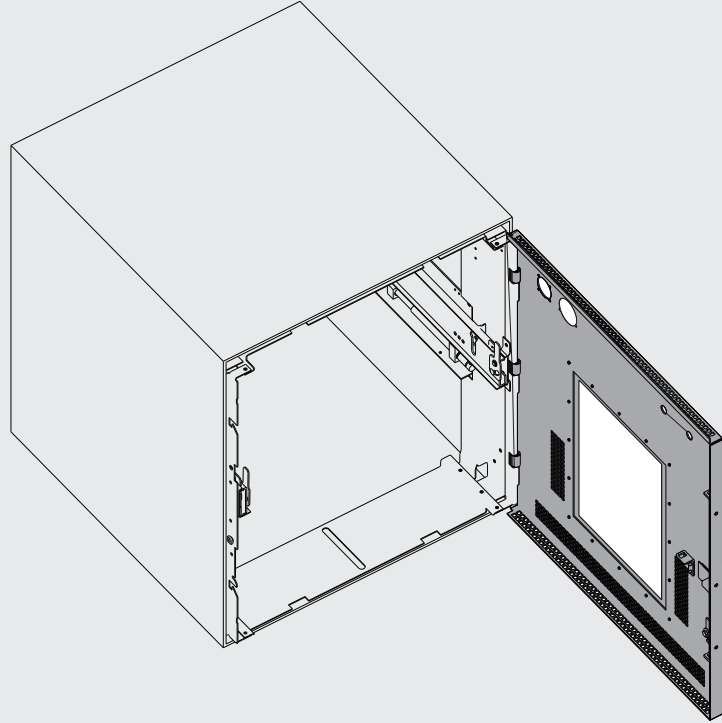
Two cutouts
for lamp

Procedure to uninstall existing door

1

AKD5/6

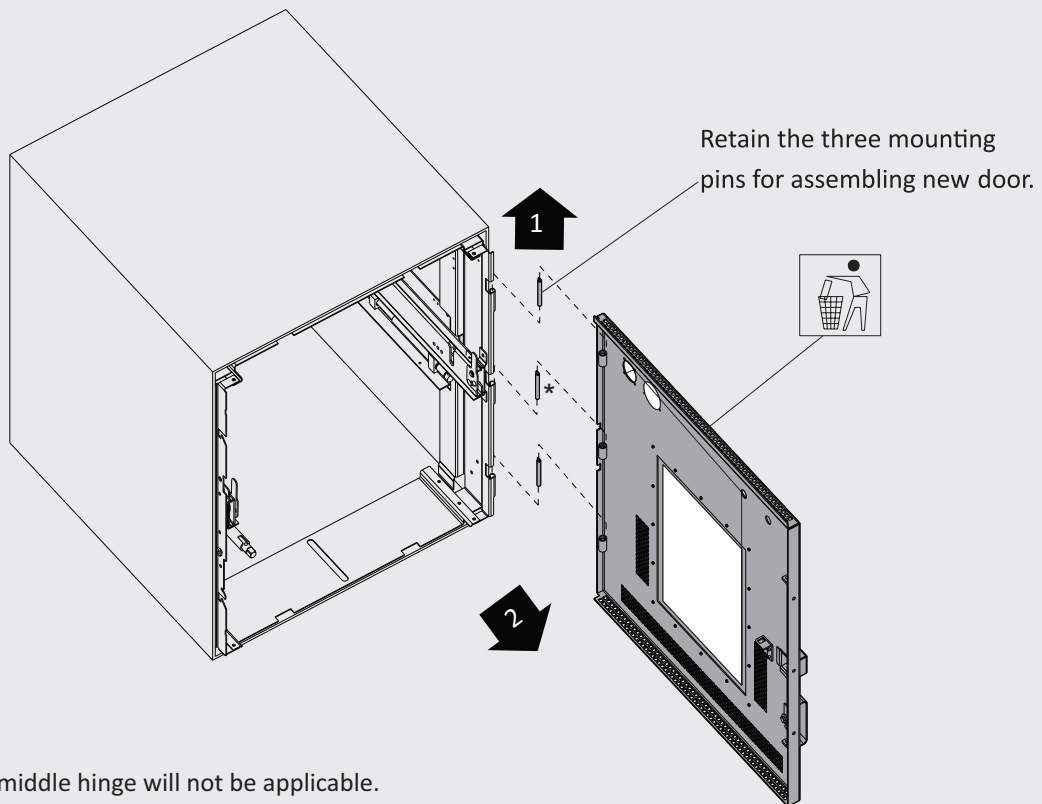
De-energize/switch off the LVS section that is to be retrofitted.
Open the compartment door that is to be retrofitted
Rack out the existing beaker from the LVS.



2

AKD5/6

Keep the door open for accessing the door mounting pins placed on the right-side wall in the LVS compartment.
The door hinge is mounted via 2/3-mounting pins that hold the door in place.
Lift the pin out of the hinge joint. This allows access for removing the old door from the LVS compartment.



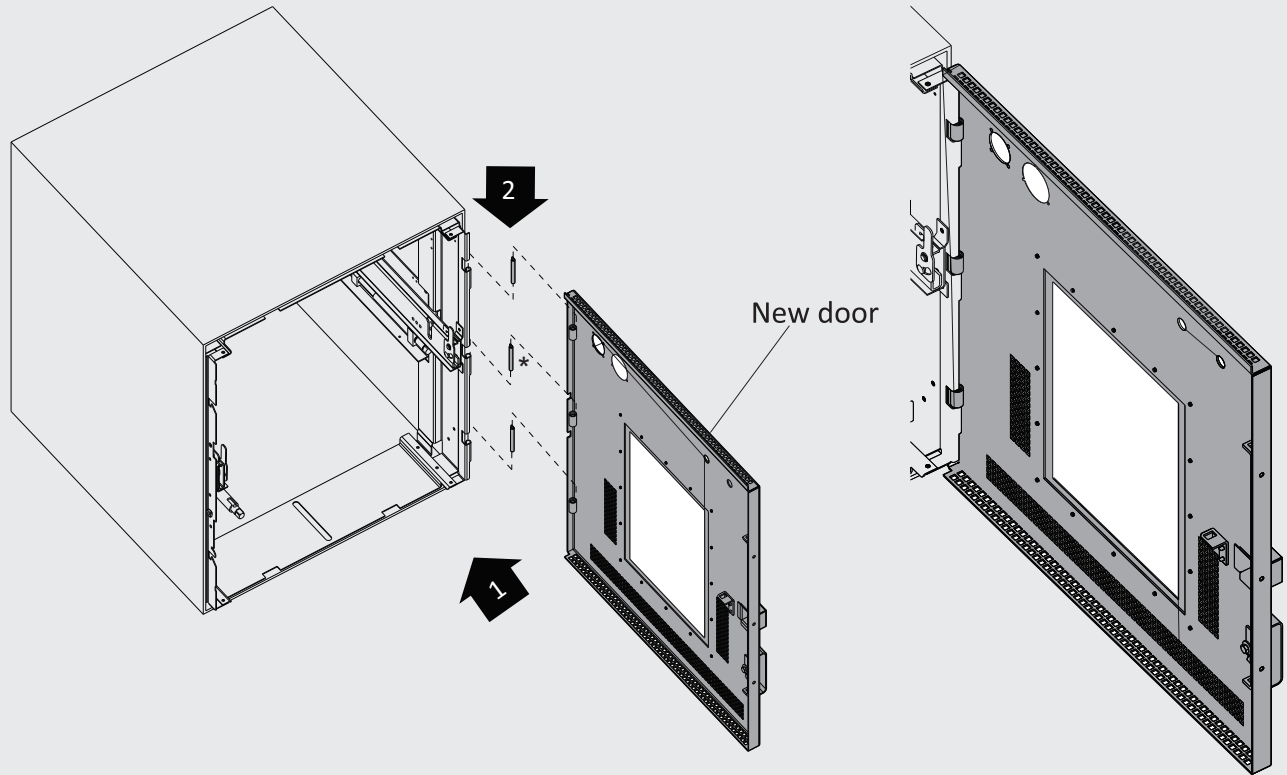
*For all AK25 doors middle hinge will not be applicable.

Procedure to install new door

3

AKD5/6

Unpack the new door assembly and mount it on to door mounting hinges, align the holes and use the previously removed pins for assembly of door.

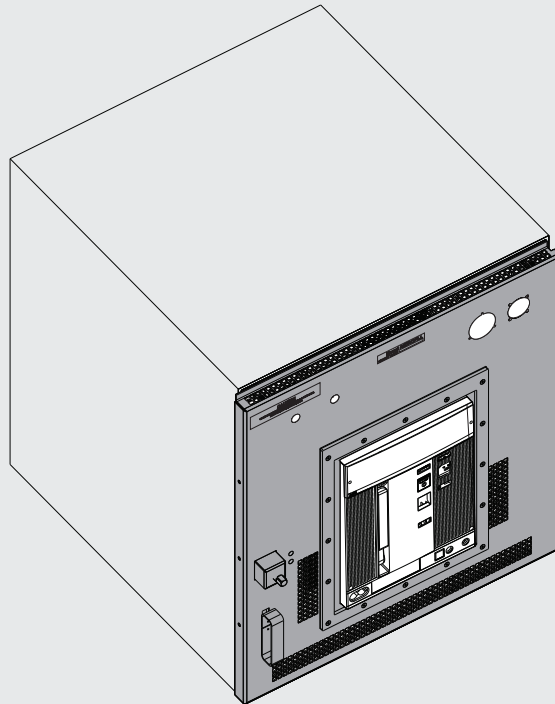


*For all AK25 doors middle hinge will not be applicable.

4

AKD5/6

Close the new door and secure it to the compartment.

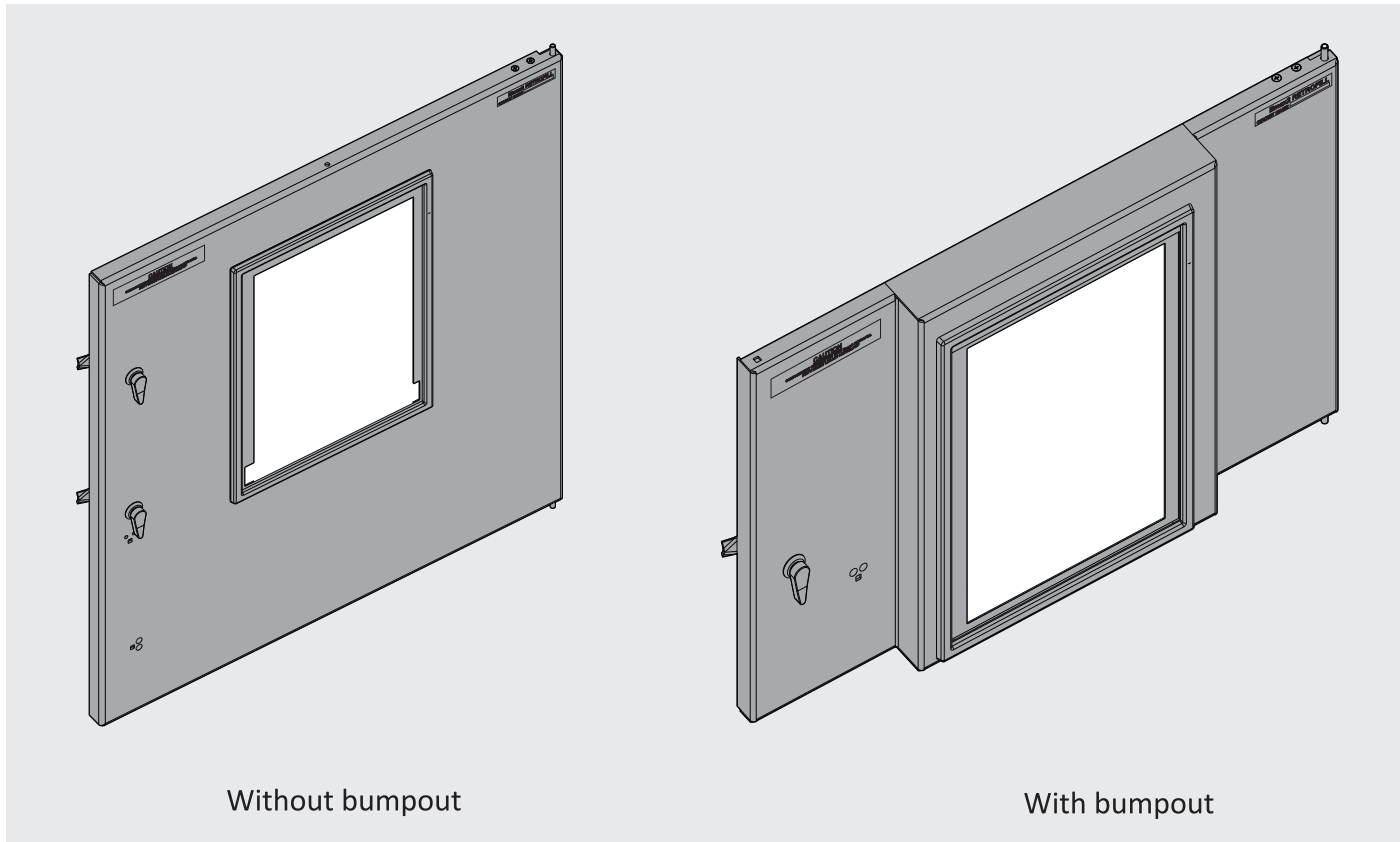


AKD8/10 DR Emax Full Door Kits

Retrofit doors can be ordered as required, depending on door size. Table 2 lets you select a specific door type for AKD8/10 switch gear. It can be ordered by catalogue numbers by referring to the last column in the table. All the doors in the Table 2 are right-hand doors. It takes about 15 to 20 minutes to install the retro fill door(s) in the switchgear.

Table 2 Replacement Door Categories (TOP LEVEL)				
LV SWITCH GEAR	BREAKER TYPE	DOOR WIDTH	DOOR BUMP OUT	CAT#
		(inches)	(inches)	
AKD-8	AKR-30S	22	YES (2.95")	2TSE431959R1000
AKD-8	AKR-30S	30	YES (2.95")	2TSE431960R1000
AKD-8 & AKD-10	AKR-30/50/T50 WP-08/16/20	22	YES (1.00")	2TSE431961R1000
			NO	2TSE431961R1001
AKD-8 & AKD-10	AKR-30/50/T50 WP-08/16/20	30	NO	2TSE431962R1000
AKD-8	AKR-75/100	30	NO	2TSE431963R1000
AKD-8	AKR-125	38	NO	2TSE431964R1000
AKD-10	WP-32 & WP-40	30	NO	2TSE431965R1000
AKD-10	WP-50	38	NO	2TSE431966R1000

Figure 2. Typical door for AKD8/10 with and without bumpouts

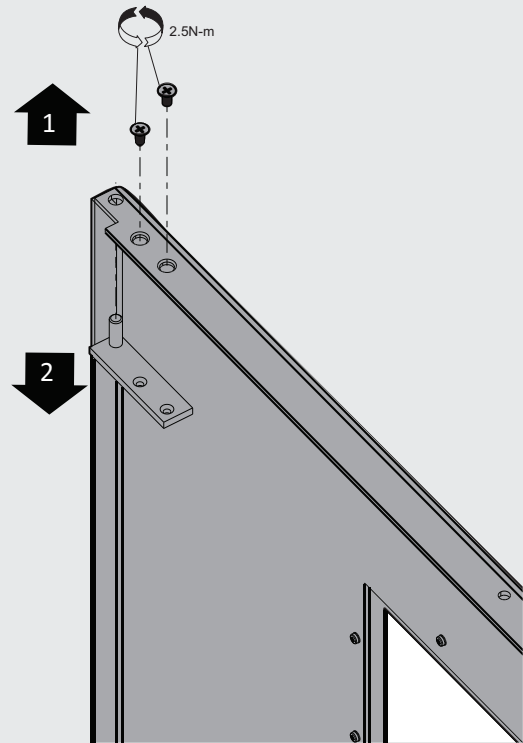
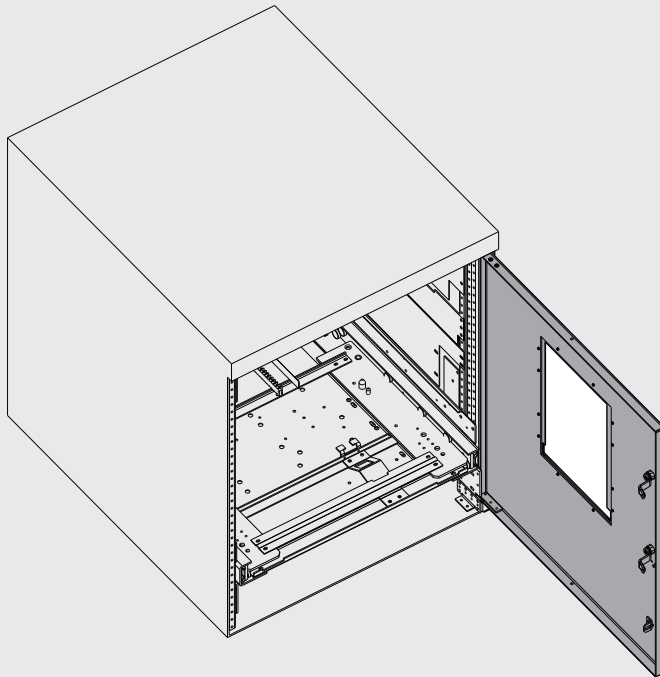


Procedure to uninstall existing door

5

AKD8/10

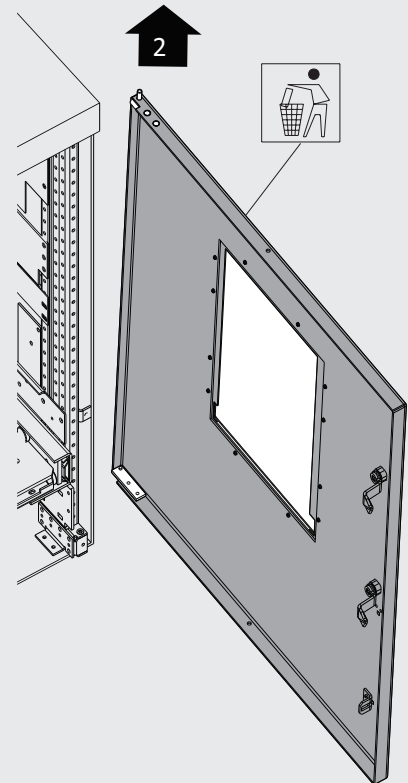
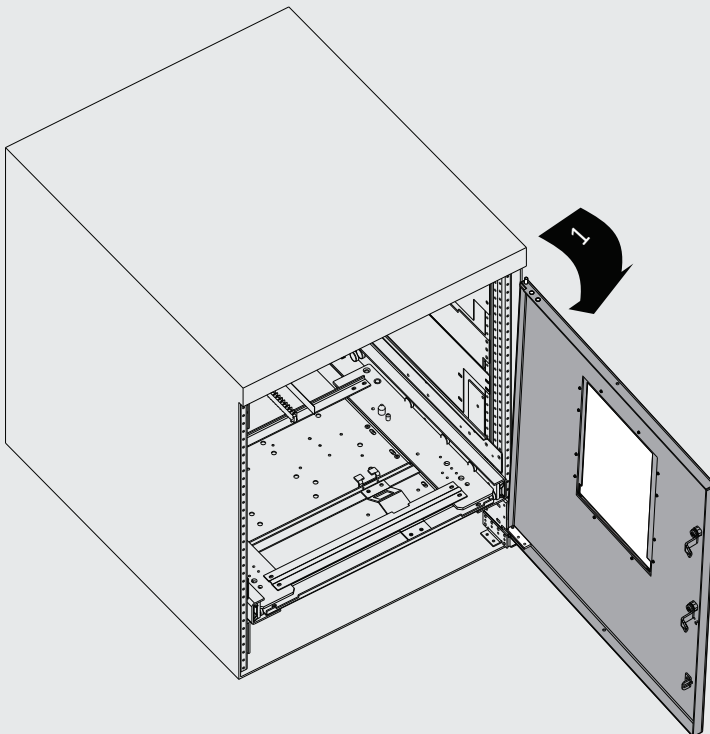
De-energize/switch off the LVS section that is to be retrofitted
Open the compartment door that is to be retrofitted.
Rack out the existing beaker from the LVS.
Remove two flat head screws.



6

AKD8/10

Remove the old door by tilting in clock wise and moving upwards.
Scrap the old door.



Procedure to install new door

7

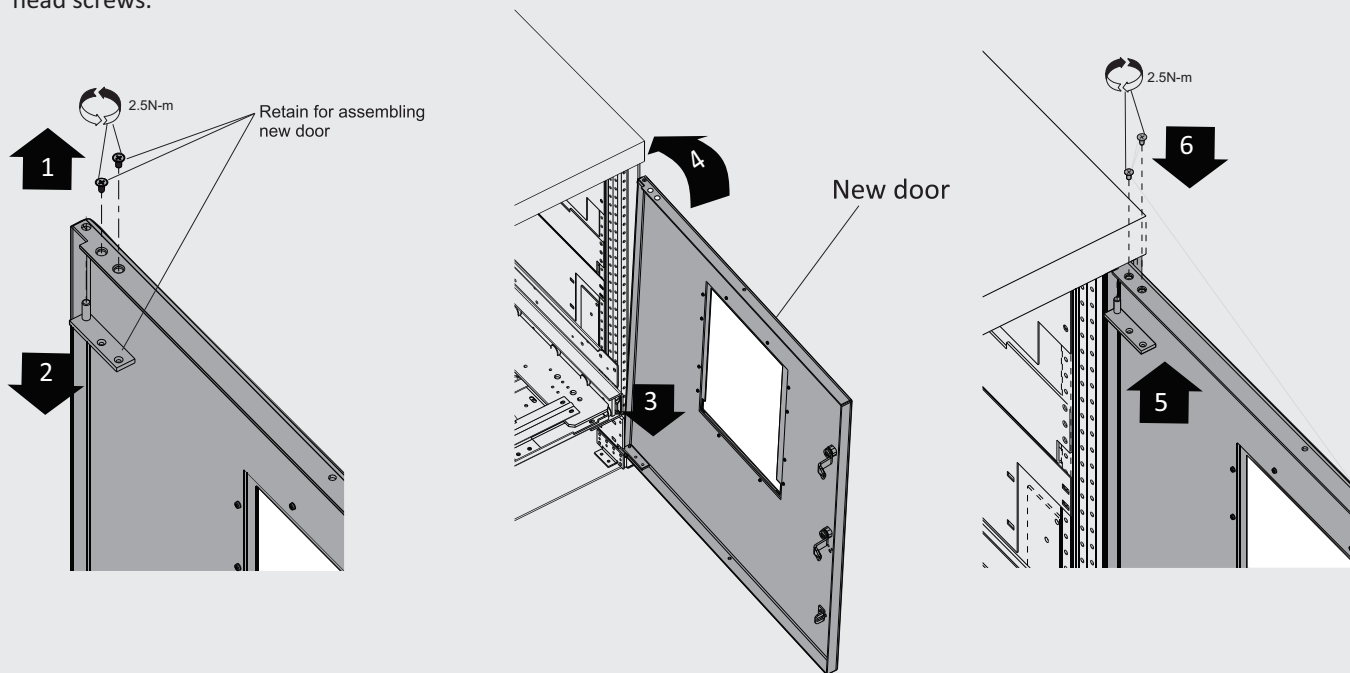
AKD8/10

Unpack the new door assembly.

Remove the two flat head screws along the top hinge plate and retain back them for assembly.

Install the new door by aligning the bottom hinge pin of door with bottom hole of switchgear compartment.

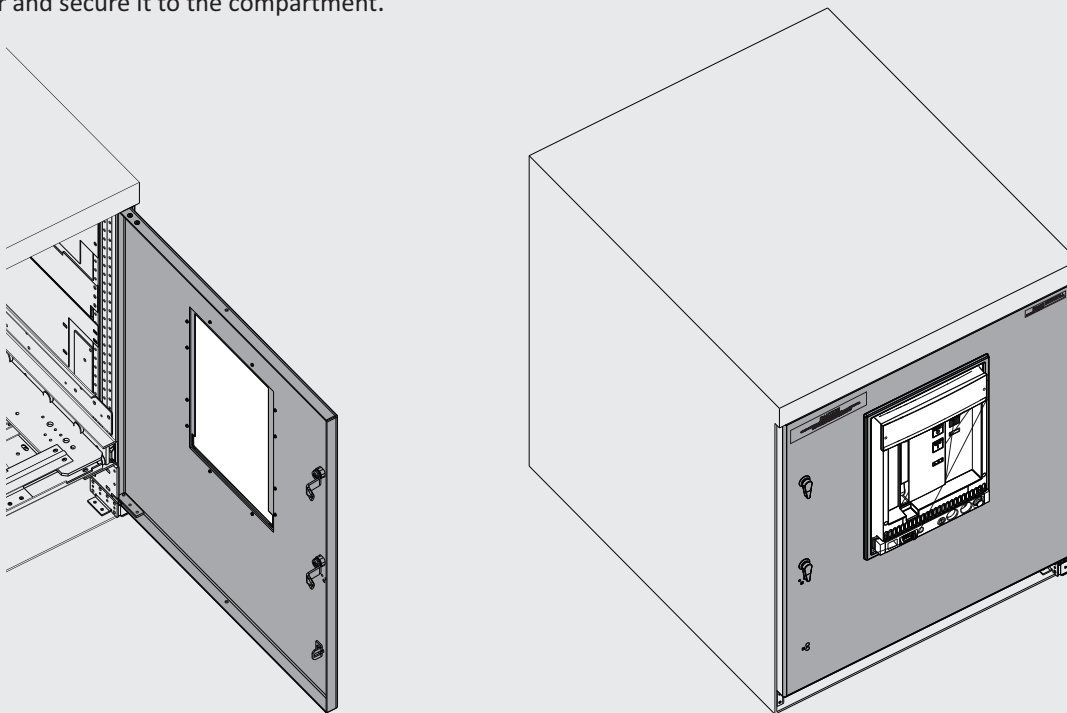
Align the top hole of door with top hole of compartment and assemble back the hinge plate using two flat head screws.



8

AKD8/10

Close the new door and secure it to the compartment.



For more information please contact your local ABB Field Representative or Service Center listed below:

ABB Inc.

1555 Scott Steet

Senatobia, MS 38668

Ph-: 1-662-562-0700